

Appl. No. 10/597,124
Reply to Office Action Dated April 28, 2008

REMARKS

The above amendment with the following remarks is submitted to be fully responsive to the final Office Action of April 28, 2008. Claims 1-9 were pending in the present application prior to the above amendment. In the present amendment, claims 1-2, 4-5 and 7 have been amended to correct discovered informalities, and new claims 10-11 have been added. Therefore, claims 1-11 are pending in the present application and are believed to be in proper condition for allowance. No new matter is introduced (see, e.g., original claims 1-2, 4-5 and 7 as filed). Reconsideration in view of the above amendments and following remarks is respectfully requested.

First, Applicants wish to thank the Examiner for the indication of allowable subject matter with respect to dependent system claims 5-6. Accordingly, (i) dependent system claim 5 has been rewritten in independent form and to correct informalities, and (ii) new method claims 10-11 based on system claims 5-6 have been added. Thus, claims 5-6 and 10-11 are in condition for allowance. In addition, claims 1-4, and 7-9 also are in condition for allowance, as set forth in detail below.

Claims 1-4, and 7-9 patentably distinguish over the applied references, (1) German Publication 29616832, (2) Kunz et al. (USP 3,914,175), (3) UK patent 1,418,806, (4) PCT publication WO 0220115, (5) Kingsbury et al. (USP 3,231,091) and (6) Lawson et al. (USP 2,405,838), as the applied references, alone or in combination, fail to disclose, teach or suggest all of the features recited in the pending claims. For example, independent claim 1, as amended recites (emphasis added):

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A system for separating a water/hydrocarbons emulsion fluid into a recovered oil fluid and a purified water fluid, the water/hydrocarbons emulsion fluid comprising a continuous phase and a dispersed phase, the purified water fluid being essentially constituted of the continuous phase, the system comprising:

a vessel at an inlet of which the water/hydrocarbons emulsion fluid may flow;

one or more coalescing elements made of Reusable Polymer Absorbent material, each coalescing element allowing to coalesce at least a portion of the dispersed phase from small droplets into large drops, said large drops being further detached from the coalescing element upon a flow of the emulsion fluid;

one or more separating and guiding means made of an oleophilic material, each separating and guiding means being associated with one coalescing element and being disposed at an output of the associated coalescing element to guide said detached large drops for further recovery and having a structure that is adapted to allow the continuous phase to flow through the separating and guiding means.

Independent claim 7, as amended, recites (emphasis added):

A method for recovering from a water/hydrocarbons emulsion fluid a recovered oil fluid and a purified water fluid, the water/hydrocarbons emulsion fluid comprising a continuous phase and a dispersed phase, the purified water fluid being essentially constituted of the continuous phase, the method comprising:

providing a flow of at least a portion of the water/hydrocarbons emulsion fluid through at least one bed within a vessel, each bed supporting a coalescing element made of Reusable Polymer Absorbent material, whereby at least a portion of the dispersed phase coalesces from small droplets into large drops;

detaching said large drops from each bed by means of a flow velocity;

guiding the detached large drops with at least one separating and guiding means made of an oleophilic material, the at least one separating and guiding means being associated with the at least one bed, said separating and guiding means having a structure that is adapted to allow the continuous phase to flow through the separating and guiding means;

recovering the recovered oil fluid from the guided large drops; and

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recovering the purified water fluid from the continuous phase.

Thus, independent claims 1 and 7 are directed to a novel and unobvious system and method for recovering from a water/hydrocarbons emulsion fluid a recovered oil fluid and a purified water fluid, including separating and guiding means made of an oleophilic material to guide detached large drops for further recovery and having a structure that is adapted to allow a continuous phase to flow through the separating and guiding means. Advantageously, with the invention of independent claims 1 and 7, the separating and guiding means made of an oleophilic material allow intercepted large drops to adhere thereto (see, e.g., paragraph [0069] of the published Specification).

By contrast, the applied references, alone or in combination, fail to disclose, teach or suggest all of the features and advantages of the invention of independent claims 1 and 7. Specifically, although German Publication 29616832 appears to disclose in Figs. 2-3 a guiding means 4, as far as Applicants can discern from the German text, this reference fails to disclose the separating and guiding means made of an oleophilic material. Similarly, Kunz et al. discloses baffle plates 5, but also fails to disclose the separating and guiding means made of an oleophilic material. The remaining references, UK patent 1,418,806, PCT publication WO 0220115, Kingsbury et al. and Lawson et al., do not disclose use of a separating and guiding means, much less a separating and guiding means made of an oleophilic material.

Therefore, independent claims 1 and 7 and claims dependent therefrom are allowable over the applied references, alone or in combination.

In addition, the Final Office Action fails to indicate how the applied references disclose, teach, or suggest the features recited in dependent claims 2 and 4. Nonetheless, Applicants

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submit that dependent claims 2-4 and 8-9 are allowable over the applied references, alone or in combination, on their own merits and for at least the reasons presented above with respect to independent claims 1 and 7.

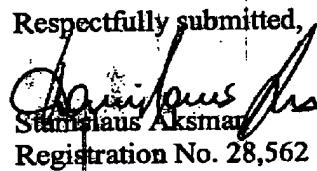
In view of the foregoing, it is submitted that the present application is in condition for allowance and a notice to that effect is respectfully requested. However, if the Examiner deems that any issue remains after considering this response, the Examiner is invited to contact the undersigned attorney to expedite the prosecution and place all claims in condition for allowance.

The Commissioner is authorized to charge any fee associated with the submission of this response, including fees for extensions of time and any other fee necessary for the processing of this reply to Deposit Account No. 50-2183 (Reference Number 21.1197).

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